What is claimed is:

1. A light scanning method comprising the steps of:

(a) making plural light beams emitted from a light source incident at least onto reflection surfaces of a deflector in a mutually parallel state in a direction orthogonal to a main scanning direction;

(b) deflecting the plural light beams by said deflector; and

(c) focusing the plural light beams deflected by said deflector on a surface to be scanned, with an afocal relation between the reflection surfaces of the deflector and the surface to be scanned in the direction orthogonal to the main scanning direction.

2. A light scanning device which deflects plural light beams emitted from a light source by making the light beams incident on reflection surfaces of a deflector, and scans the surface to be scanned simultaneously by the plural light beams deflected by the deflector, the device comprising:

(a) a first optical system for making the plural light beams incident at least onto the reflection surfaces of the deflector in a mutually parallel state in a direction orthogonal to a main scanning direction; and

(b) a second optical system for focusing the plural light beams, which were deflected by the deflector, onto a surface to be scanned, with an afocal relation between the reflection surfaces of the deflector and the surface to be scanned in the direction orthogonal to the main scanning direction.

3. The light scanning device of claim 2, wherein said light source emits the plural light beams in a mutually parallel state, and said first

optical system sets an afocal and conjugate relation between said light source and the reflection surfaces of said deflector.

4. The light scanning device of claim 3, wherein said first optical system comprises a collimator lens for making the light beams emitted from the light source as divergent luminous flux into a substantially parallel luminous flux, and a cylinder lens having power for condensing into the direction orthogonal to the main scanning direction, and focusing the light beams made into substantially parallel luminous flux by the collimator lens as a line which is long in the main scanning direction on the reflection surfaces of the deflector, and

said collimator lens and cylinder lens are disposed such that a focal position at a light beam advancing direction downstream side of the collimator lens substantially coincides with a focal position at a light beam advancing direction upstream side of the cylinder lens.

5. The light scanning device of claim 2, wherein said second optical system focuses the plural light beams deflected by said deflector on the surface to be scanned, while setting a conjugate relation between the reflection surfaces of the deflector and the surface to be scanned.

6. The light scanning device of claim 5, wherein said second optical system comprises an f θ optical system having power for condensing only in the main scanning direction, a first cylinder optical system having power for condensing in the direction orthogonal to the main scanning direction, and a second cylinder optical system having power for condensing in the direction orthogonal to the main scanning direction, and

said first cylinder optical system and second cylinder optical system are disposed such that a focal position at a light beam advancing direction downstream side of the first cylinder optical system substantially coincides with a focal position at a light beam advancing direction upstream side of the second cylinder optical system.

7. The light scanning device of claim 6, wherein the power of said first cylinder optical system for condensing in the direction orthogonal to the main scanning direction is smaller than the power of said second cylinder optical system for condensing in the direction orthogonal to the main scanning direction.

8. The light scanning device of claim 2, wherein said light source is a vertical cavity surface emitting laser diode array having plural light emission points disposed in a two-dimensional arrangement.

9. A light scanning device comprising:

a light source;

a deflector for deflecting plural light beams emitted from said light source toward a surface to be scanned;

a first optical system including a collimator lens for making the light beams emitted from the light source as divergent luminous flux into substantially parallel luminous flux, and a cylinder lens having power for condensing in a direction orthogonal to a main scanning direction, and focusing the light beams made into substantially parallel luminous flux by the collimator lens as a line which is long in the main scanning direction on the reflection surfaces of the deflector, and

a second optical system including an f θ optical system having

power for condensing only in the main scanning direction, a first cylinder optical system having power for condensing in the direction orthogonal to the main scanning direction, and a second cylinder optical system having power for condensing in the direction orthogonal to the main scanning direction,

wherein said first optical system sets an afocal and conjugate relation between the light source and reflection surfaces of the deflector, and said second optical system focuses the plural light beams deflected by said deflector onto the surface to be scanned while setting a conjugate relation between the reflection surfaces of the deflector and the surface to be scanned.

10. The light scanning device of claim 9, wherein said deflector is a rotary polygonal mirror rotating at a predetermined speed.